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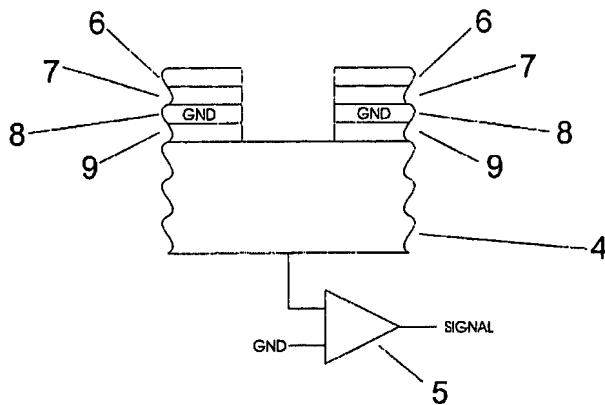
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(54) Title: MICROMACHINED FIELD ASYMMETRIC ION MOBILITY SPECTROMETER



(57) Abstract: An ion mobility spectrometer is described having an ion filter in the form of multiple parallel ion channels defined by conductive layers (6, 8) separated by non-conductive layers (7, 9). A time-varying electric potential applied to the conductive layers allows the filter to selectively admit ion species. The device may be used without a drift gas flow. Microfabrication techniques are described for producing microscale spectrometers, as are various uses of the spectrometer.

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